

FILE 'VETU' ENTERED AT 14:06:09 ON 11 JAN 2006
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FILE 'WPINDEX' ACCESS NOT AUTHORIZED

=> s mobile phase modifier and amine
15 FILES SEARCHED...
46 FILES SEARCHED...
65 FILES SEARCHED...
L1 132 MOBILE PHASE MODIFIER AND AMINE

=> s stationary phase and silica
30 FILES SEARCHED...
64 FILES SEARCHED...
L2 36714 STATIONARY PHASE AND SILICA

=> s L1 and L2
60 FILES SEARCHED...
L3 30 L1 AND L2

=> dup rem
ENTER L# LIST OR (END):L3
DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, DGENE, DRUGMONOG2,
FEDRIP, FOREGE, GENBANK, IMSPRODUCT, IMSRESEARCH, KOSMET, NUTRACEUT, PCTGEN,
PHAR, PHARMAML, PROUSDDR, PS, RDISCLOSURE, SYNTHLINE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L3
L4 25 DUP REM L3 (5 DUPLICATES REMOVED)

=> s L4 and purification
28 FILES SEARCHED...
64 FILES SEARCHED...
L5 11 L4 AND PURIFICATION

=> d L5 1-11 ibib,abs

L5 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:414763 CAPLUS
DOCUMENT NUMBER: 140:402847
TITLE: Using **amines** or amino acids as
mobile phase modifiers in
chromatography
INVENTOR(S): Goklen, Kent E.; Nti-Gyabaah, Joseph; Antia, Firoz D.;
Dahlgren, Mary Ellen
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2004042350 | A2 | 20040521 | WO 2003-US33978 | 20031024 |
| WO 2004042350 | A3 | 20040715 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,

GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
 PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 EP 1558354 A2 20050803 EP 2003-776553 20031024
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
 PRIORITY APPLN. INFO.: US 2002-422356P P 20021030
 WO 2003-US33978 W 20031024

AB This invention relates to the use of **amine**, amino acid or amino
 acid ester **mobile phase modifiers** in normal
 phase chromatog. to improve the resolution and/or productivity of peptide and
 lipopeptide **purifn.** This chromatog. method can be used for
 either on anal. or preparative scale **purifn.**

L5 ANSWER 2 OF 11 USPATFULL on STN

ACCESSION NUMBER: 2003:232021 USPATFULL
 TITLE: Yeast proteome analysis
 INVENTOR(S): Bader, Gary, North York, CANADA
 Climie, Shane, Toronto, CANADA
 Durocher, Daniel, Toronto, CANADA
 Figeys, Joseph Michael Daniel, Pickering, CANADA
 Gruhler, Albrecht, Odense N, DENMARK
 Heilbut, Adrian Mark, Toronto, CANADA
 Ho, Yuen, Toronto, CANADA
 Moore, Lynda A., Toronto, CANADA
 Moran, Michael, Toronto, CANADA
 Muskat, Brenda, Toronto, CANADA
 Tyers, Michael, Toronto, CANADA
 Wolting, Cheryl Deanna, Toronto, CANADA

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|---------------|
| PATENT INFORMATION: | US 2003162221 | A1 | 20030828 |
| APPLICATION INFO.: | US 2002-252749 | A1 | 20020923 (10) |

| | NUMBER | DATE |
|-----------------------|-----------------|---------------|
| PRIORITY INFORMATION: | US 2001-323930P | 20010921 (60) |
| | US 2001-341213P | 20011030 (60) |
| | US 2002-345286P | 20020104 (60) |

DOCUMENT TYPE: Utility
 FILE SEGMENT: APPLICATION
 LEGAL REPRESENTATIVE: ROPES & GRAY, ONE INTERNATIONAL PLACE, BOSTON, MA,
 02110-2624

NUMBER OF CLAIMS: 58
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 5 Drawing Page(s)
 LINE COUNT: 5644

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and reagents for high throughput analysis of protein-protein
 interaction networks using mass spectrometry.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 3 OF 11 USPATFULL on STN

ACCESSION NUMBER: 2003:219717 USPATFULL
 TITLE: Automated systems and methods for analysis of protein
 post-translational modification
 INVENTOR(S): Chen, Jian, Mississauga, CANADA
 Daniel Figeys, Joseph Michel, Pickering, CANADA
 Larsen, Brett, Toronto, CANADA
 White, Forest M., Charlottesville, VA, UNITED STATES

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|---------------|
| PATENT INFORMATION: | US 2003153007 | A1 | 20030814 |
| APPLICATION INFO.: | US 2002-330861 | A1 | 20021226 (10) |

| | NUMBER | DATE |
|-----------------------|---|---------------|
| PRIORITY INFORMATION: | US 2001-343645P | 20011228 (60) |
| | US 2002-361236P | 20020301 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | ROPES & GRAY LLP, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624 | |
| NUMBER OF CLAIMS: | 31 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 3 Drawing Page(s) | |
| LINE COUNT: | 2757 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and systems of applying mass spectrometry to the analysis of peptides and amino acids, especially in the proteome setting. More particularly, the invention relates to a mass spectrometry-based method for detection of amino acid modifications, such as phosphorylation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 4 OF 11 USPATFULL on STN
 ACCESSION NUMBER: 2003:173218 USPATFULL
 TITLE: Detection of differential expression of protein using gel-free proteomics
 INVENTOR(S): Brame, Cynthia J., Charlottesville, VA, UNITED STATES

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|---------------|
| PATENT INFORMATION: | US 2003119062 | A1 | 20030626 |
| APPLICATION INFO.: | US 2002-211945 | A1 | 20020802 (10) |

| | NUMBER | DATE |
|-----------------------|---|---------------|
| PRIORITY INFORMATION: | US 2001-309903P | 20010803 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | ROPES & GRAY, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624 | |
| NUMBER OF CLAIMS: | 17 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 2 Drawing Page(s) | |
| LINE COUNT: | 2835 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and reagents for analyzing differential expression and/or abundance of distinct membrane-associated polypeptide samples, particularly integral membrane polypeptide samples are provided. Also provided are methods for screening pharmaceutical components that can affect expression or abundance of certain membrane-associated polypeptides; methods for identification of drug targets; and methods for diagnosis of certain disease states. Business methods for conducting a pharmaceutical business based on the result of using the above methods are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 5 OF 11 USPATFULL on STN
 ACCESSION NUMBER: 2001:79286 USPATFULL
 TITLE: Low molecular weight displacers for protein **purification** in hydrophobic interaction and reversed phase chromatographic systems
 INVENTOR(S): Cramer, Steven M., Schenectady, NY, United States
 Shukla, Abhinav A., Bothell, WA, United States
 Sunasara, Khurram M., Troy, NY, United States

PATENT ASSIGNEE(S): Rensselaer Polytechnic Institute, Troy, NY, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|--------------|
| PATENT INFORMATION: | US 6239262 | B1 | 20010529 |
| APPLICATION INFO.: | US 1998-223093 | | 19981230 (9) |

| | NUMBER | DATE |
|-----------------------|--|---------------|
| PRIORITY INFORMATION: | US 1998-70653P | 19980107 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | Granted | |
| PRIMARY EXAMINER: | Low, Christopher S. F. | |
| ASSISTANT EXAMINER: | Mohamed, Abdel A. | |
| LEGAL REPRESENTATIVE: | Heslin & Rothenberg, PC | |
| NUMBER OF CLAIMS: | 31 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 18 Drawing Figure(s); 18 Drawing Page(s) | |
| LINE COUNT: | 619 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for **purification** of proteins by displacement chromatography in hydrophobic interaction and reversed phase chromatographic systems uses low molecular weight (less than about 10,000) surface-active compounds as displacers. Examples of effective displacers are benzethonium chloride, benzyltributylammonium chloride, and tetrahexylammonium chloride.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 6 OF 11 USPATFULL on STN
ACCESSION NUMBER: 95:32900 USPATFULL
TITLE: Carbon-clad zirconium oxide particles
INVENTOR(S): Funkenbusch, Eric F., Hudson, WI, United States
Carr, Peter W., Minneapolis, MN, United States
Hanggi, Douglas A., St. Paul, MN, United States
Weber, Thomas P., Shoreview, MN, United States
PATENT ASSIGNEE(S): Regents of the University of Minnesota, Minneapolis, MN, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|---------------------|
| PATENT INFORMATION: | US 34910 | | 19950418 |
| | US 5108597 | | 19920428 (Original) |
| APPLICATION INFO.: | US 1993-42087 | | 19930401 (8) |
| | US 1990-497594 | | 19900322 (Original) |
| DOCUMENT TYPE: | Reissue | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Therkorn, Ernest G. | | |
| LEGAL REPRESENTATIVE: | Schwegman, Lundberg & Woessner | | |
| NUMBER OF CLAIMS: | 9 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 7 Drawing Figure(s); 6 Drawing Page(s) | | |
| LINE COUNT: | 1923 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Carbon-clad zirconium oxide particles are disclosed which are useful in sorbent applications, particularly as packing materials for High Performance Liquid Chromatography (HPLC). A method for the preparation of chromatographic support material is also disclosed which utilizes low pressure.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 7 OF 11 USPATFULL on STN
ACCESSION NUMBER: 94:79708 USPATFULL
TITLE: Carbon-clad zirconium oxide particles
INVENTOR(S): Funkenbusch, Eric F., White Bear Lake, MN, United States

Carr, Peter W., Minneapolis, MN, United States
Hanggi, Douglas A., St. Paul, MN, United States
Weber, Thomas P., Minneapolis, MN, United States
Regents of the University of Minnesota, Minneapolis,
MN, United States (U.S. corporation)

PATENT ASSIGNEE(S):

| NUMBER | KIND | DATE |
|--------|------|------|
|--------|------|------|

| | | |
|-----------------------|--|--------------|
| PATENT INFORMATION: | US 5346619 | 19940913 |
| APPLICATION INFO.: | US 1993-92387 | 19930714 (8) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1993-5873, filed on 15 Jan 1993, now patented, Pat. No. US 5254262 which is a continuation of Ser. No. US 1991-805529, filed on 11 Dec 1991, now abandoned which is a division of Ser. No. US 1990-497594, filed on 22 Mar 1990, now patented, Pat. No. US 5108597 | |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Therkorn, Ernest G.
LEGAL REPRESENTATIVE: Woessner, Warren D.
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 6 Drawing Page(s)
LINE COUNT: 1868

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Carbon-clad zirconium oxide particles are disclosed which are useful in sorbent applications, particularly as packing materials for High Performance Liquid Chromatography (HPLC). A method for the preparation of chromatographic support material is also disclosed which utilizes low pressure.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 8 OF 11 USPATFULL on STN

ACCESSION NUMBER: 93:106708 USPATFULL
TITLE: Polymer-coated carbon-clad inorganic oxide particles
INVENTOR(S): Funkenbusch, Eric F., St. Paul, MN, United States
Carr, Peter W., Minneapolis, MN, United States
Hanggi, Douglas A., St. Paul, MN, United States
Weber, Thomas P., St. Paul, MN, United States
PATENT ASSIGNEE(S): Regents of the University of Minnesota, Minneapolis,
MN, United States (U.S. corporation)

| NUMBER | KIND | DATE |
|--------|------|------|
|--------|------|------|

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|-----------------------|--|--------------|
| PATENT INFORMATION: | US 5271833 | 19931221 |
| APPLICATION INFO.: | US 1992-963697 | 19921020 (7) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1991-761431, filed on 18 Sep 1991, now patented, Pat. No. US 5182016 which is a continuation of Ser. No. US 1990-497595, filed on 22 Mar 1990, now abandoned | |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Therkorn, Ernest G.
LEGAL REPRESENTATIVE: Merchant, Gould, Smith, Edell, Welter & Schmidt
NUMBER OF CLAIMS: 51
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 16 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 2371

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polymer-coated carbon-clad inorganic oxide particles are disclosed which are useful in sorbent applications, particularly as packing materials for High Performance Liquid Chromatography (HPLC). A method for the preparation of a chromatographic support material is also disclosed which comprises coating carbon-clad inorganic oxide particles with a monomer or oligomer and cross-linking the monomer or oligomer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 9 OF 11 USPATFULL on STN

ACCESSION NUMBER: 93:87050 USPATFULL
TITLE: Carbon-clad zirconium oxide particles
INVENTOR(S): Funkenbusch, Eric F., St. Paul, MN, United States
Carr, Peter W., Minneapolis, MN, United States
Hanggi, Douglas A., St. Paul, MN, United States
Weber, Thomas P., St. Paul, MN, United States
PATENT ASSIGNEE(S): Regents of the University of Minnesota, Minneapolis,
MN, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 5254262 | | 19931019 |
| APPLICATION INFO.: | US 1993-5873 | | 19930115 (8) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1991-805529, filed on 21 Dec 1991, now abandoned which is a division of Ser. No. US 1990-497594, filed on 22 Mar 1990, now patented, Pat. No. US 5108597 | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Therkorn, Ernest G. | | |
| LEGAL REPRESENTATIVE: | Merchant, Gould, Smith, Edell, Welter & Schmidt | | |
| NUMBER OF CLAIMS: | 11 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 7 Drawing Figure(s); 6 Drawing Page(s) | | |
| LINE COUNT: | 1884 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Carbon-clad zirconium oxide particles are disclosed which are useful in sorbent applications, particularly as packing materials for High Performance Liquid Chromatography (HPLC). A method for the preparation of chromatographic support material is also disclosed which utilizes low pressure.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 10 OF 11 USPATFULL on STN

ACCESSION NUMBER: 93:6850 USPATFULL
TITLE: Polymer-coated carbon-clad inorganic oxide particles
INVENTOR(S): Funkenbusch, Eric F., St. Paul, MN, United States
Carr, Peter W., Minneapolis, MN, United States
Hahggi, Douglas A., St. Paul, MN, United States
Weber, Thomas P., St. Paul, MN, United States
PATENT ASSIGNEE(S): Regents of the University of Minnesota, Minneapolis,
MN, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 5182016 | | 19930126 |
| APPLICATION INFO.: | US 1991-761431 | | 19910918 (7) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1990-497595, filed on 22 Mar 1990, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Therkorn, Ernest G. | | |
| LEGAL REPRESENTATIVE: | Merchant, Gould, Smith, Edell, Welter & Schmidt | | |
| NUMBER OF CLAIMS: | 31 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 15 Drawing Figure(s); 8 Drawing Page(s) | | |
| LINE COUNT: | 2310 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polymer-coated carbon-clad inorganic oxide particles are disclosed which are useful in sorbent applications, particularly as packing materials for High Performance Liquid Chromatography (HPLC). A method for the preparation of a chromatographic support material is also disclosed which comprises coating carbon-clad inorganic oxide particles with a monomer or oligomer and cross-linking the monomer or oligomer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 11 OF 11 USPATFULL on STN

ACCESSION NUMBER: 92:33761 USPATFULL

TITLE: Carbon-clad zirconium oxide particles

INVENTOR(S): Funkenbusch, Eric F., St. Paul, MN, United States

Carr, Peter W., Minneapolis, MN, United States

Hanggi, Douglas A., St. Paul, MN, United States

Weber, Thomas P., St. Paul, MN, United States

PATENT ASSIGNEE(S): Regents of the University of Minnesota, Minneapolis,

MN, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 5108597 | | 19920428 |
| APPLICATION INFO.: | US 1990-497594 | | 19900322 (7) |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Therkorn, Ernest G. | | |
| LEGAL REPRESENTATIVE: | Merchant, Gould, Smith, Edell, Welter & Schmidt | | |
| NUMBER OF CLAIMS: | 10 | | |
| EXEMPLARY CLAIM: | 8 | | |
| NUMBER OF DRAWINGS: | 7 Drawing Figure(s); 6 Drawing Page(s) | | |
| LINE COUNT: | 1869 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Carbon-clad zirconium oxide particles are disclosed which are useful in sorbent applications, particularly as packing materials for High Performance Liquid Chromatography (HPLC). A method for the preparation of chromatographic support material is also disclosed which utilizes low pressure.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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(FILE 'HOME' ENTERED AT 14:05:00 ON 11 JAN 2006)

FILE 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ES BIOBASE, FEDRIP, ...' ENTERED AT 14:06:09 ON 11 JAN 2006

L1 132 S MOBILE PHASE MODIFIER AND AMINE
L2 36714 S STATIONARY PHASE AND SILICA
L3 30 S L1 AND L2
L4 25 DUP REM L3 (5 DUPLICATES REMOVED)
L5 11 S L4 AND PURIFICATION

=> s silica and mobile phase modifier
19 FILES SEARCHED...